## AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method executed by a computer of determining a desired product corresponding to a user objective, comprising the steps of:

providing a first ~~said~~ user objective and a second user objective;

providing a first set of input data selected from one or both of wellbore data and reservoir data, and providing a second set of input data selected from one or both of wellbore data and reservoir data;

automatically generating a first workflow in response to the first user objective, and automatically generating a second workflow in response to the second user objective;

automatically selecting a first subset of software modules of a first tool and a second subset of software modules of a second tool in response to the first workflow, wherein the first subset corresponds to a first path in the first tool that defines a first order of execution of the software modules in the first subset, and wherein the second subset corresponds to a second path in the second tool that defines a second order of execution of the software modules in the second subset;

automatically selecting a third subset of software modules of the first tool and a fourth subset of software modules of the second tool in response to said second workflow, wherein the third subset is different from the first subset, and the fourth subset is different from the second subset, wherein the third subset corresponds to a third path in the first tool that defines a third order of execution of the software modules in the third subset, wherein the third path is different from the first path, wherein the fourth subset corresponds to a fourth path in the second tool that defines a fourth order of execution of the software modules in the fourth subset, and wherein the fourth path is different from the second path;

executing ~~one or more~~ the software modules of the first subset according to the first path on a processor in response to said first set of input data;

executing ~~one or more~~ the software modules of the second subset according to the second path on said processor in response to output from the ~~one or more~~ software modules of the first subset;[[ and]]

28        executing the software modules in the third subset according to the third path on said

29    processor in response to said second set of input data;

30        executing the software modules in the fourth subset according to the fourth path on said

31    processor in response to output from the software modules of the third subset;

32        determining a first said desired product in response to at least executing the software

33    modules of the first and second subsets, wherein the first said desired product includes a model

34    of a reservoir to be produced by a well; and

35        determining a second said desired product in response to at least executing the software

36    modules of the third and fourth subsets, wherein the second said desired product includes

37    another model of the reservoir.


1    2.    (Cancelled)

1    3.     (Currently Amended) A computer-readable medium readable by a computer tangibly

2    embodying a set of instructions executable by said computer to perform method steps for

3    determining a desired product corresponding to a user objective, said method steps comprising:

4            receiving a first ~~said~~ user objective and a second user objective;

5            receiving a first set of input data selected from one or both of wellbore data and

6    reservoir data, and receiving a second set of input data selected from one or both of wellbore

7    data and reservoir data;

8            automatically generating a first workflow in response to the first user objective, and

9    automatically generating a second workflow in response to the second user objective;

10            automatically selecting a first subset of software modules of a first tool and a second

11    subset of software modules of a second tool in response to the first workflow, wherein the first

12    subset corresponds to a first path in the first tool that defines a first order of execution of the

13    software modules in the first subset, and wherein the second subset corresponds to a second

14    path in the second tool that defines a second order of execution of the software modules in the

15    second subset;

16            automatically selecting a third subset of software modules of the first tool and a fourth

17    subset of software modules of the second tool in response to said second workflow, wherein the

18    third subset is different from the first subset, and the fourth subset is different from the second

19    subset, wherein the third subset corresponds to a third path in the first tool that defines a third

20    order of execution of the software modules in the third subset, wherein the third path is

21    different from the first path, wherein the fourth subset corresponds to a fourth path in the

22    second tool that defines a fourth order of execution of the software modules in the fourth

23    subset, and wherein the fourth path is different from the second path;

24            executing ~~one or more~~ the software modules in the first subset according to the first

25    path on a processor in response to said first set of input data;

26            executing ~~one or more~~ the software modules of the second subset according to the

27    second path on said processor in response to output from the ~~one or more~~ software modules of

28    the first subset;[[ and]]

29            executing the software modules in the third subset according to the third path on said

30    processor in response to said second set of input data;

31            executing the software modules in the fourth subset according to the fourth path on said

32    processor in response to output from the software modules of the third subset;

33            determining a first said desired product in response to at least executing the software

34    modules of the first and second subsets, wherein the first said desired product includes a model

35    of a reservoir to be produced by a well; and

36            determining a second said desired product in response to at least executing the software

37    modules of the third and fourth subsets, wherein the second said desired product includes

38    another model of the reservoir.

1    4.     (Cancelled)

1    5.     (Currently Amended) A system responsive to a set of input data and a user objective for

2    generating a desired product corresponding to said user objective, comprising:

3            first apparatus for receiving a first ~~said~~ user objective and a first set of input data

4    selected from one or both of wellbore data and reservoir data, and for receiving a second user

5    objective and a second set of input data selected from one or both of wellbore data and

6    reservoir data;

7            second apparatus for automatically generating a first workflow in response to the first

8    user objective, and automatically generating a second workflow in response to the second user

9    objective;

10           third apparatus for automatically selecting a first subset of software modules of a first

11    tool and a second subset of software modules of a second tool in response to the first workflow,

12    and automatically selecting a third subset of software modules of the first tool and a fourth

13    subset of software modules of the second tool in response to said second workflow, wherein the

14    third subset is different from the first subset, and the fourth subset is different from the second

15    subset, wherein the first subset corresponds to a first path in the first tool that defines a first

16    order of execution of the software modules in the first subset, the second subset corresponds to

17    a second path in the second tool that defines a second order of execution of the software

18    modules in the second subset, the third subset corresponds to a third path in the first tool that

19    defines a third order of execution of the software modules in the third subset, and the fourth

20    subset corresponds to a fourth path in the second tool that defines a fourth order of execution of

21    the software modules in the fourth subset, where the third path is different from the first path,

22   and the fourth path is different from the second path; and

23          processor apparatus for automatically executing ~~one or more~~ the software modules of

24   the first subset according to the first path in response to said first set of input data, executing

25   ~~one or more~~ the software modules of the second subset according to the second path in

26   response to output from the ~~one or more~~ software modules of the first subset, executing the

27   software modules of the third subset according to the third path in response to said second set

28   of input data, executing the software modules in the fourth subset according to the fourth path

29   in response to output from the software modules of the third subset,[[and]] generating a first

30   said desired product in response to at least execution of the software modules of the first and

31   second subsets, and generating a second said desired product in response to at least execution

32   of the software modules of the third and fourth subsets, wherein the first said desired product

33   includes a model of a reservoir to be produced by a well, and wherein the second said desired

34   product includes another model of the reservoir.


1    6.     (Cancelled)

1    7.    (Currently Amended) A method executed by a computer for determining a final product

2    in response to a user objective, comprising the steps of:

3         providing [[said]]a first user objective and providing first input data selected from one

4    or both of wellbore data and reservoir data, and providing a second user objective and

5    providing second input data selected from one or both of wellbore data and reservoir data;

6         generating a specificfirst workflow corresponding to said first user objective, and

7    generating a second workflow corresponding to said second user objective;

8         selecting a plurality of software modules in response to said specificfirst workflow,

9    said plurality of software modules including a first subset of software modules having a first

10   predetermined sequence, and a second subset of software modules having a second

11   predetermined sequence, wherein the software modules of the first subset are part of a first tool,

12   and the software modules of the second subset are part of a second tool;

13        selecting a different plurality of software modules in response to said second workflow,

14   said different plurality of software modules including a third subset of software modules having

15   a third predetermined sequence, and a fourth subset of software modules having a fourth

16   predetermined sequence, wherein the software modules of the third subset are part of the first

17   tool, the software modules of the fourth subset are part of the second tool, wherein the third

18   predetermined sequence is different from the first predetermined sequence, and the fourth

19   predetermined sequence is different from the second predetermined sequence;

20        executing said software modules of the first subset in said first predetermined sequence

21   in response to said first input data;

22        executing said software modules of the second subset in said second predetermined

23   sequence in response to output of the first subset of software modules;[[ and]]

24        executing said software modules of the third subset in said third predetermined

25   sequence in response to said second input data;

26        executing said software modules of the fourth subset in said fourth predetermined

27   sequence in response to output of the third subset of software modules;

28        generating [[said]]a first final product when the execution of said pluralityfirst and

29   second subsets of software modules is complete, wherein said first final product includes a

30   model of a reservoir to be produced by a well; and

31        generating a second final product when the execution of said third and fourth subsets of

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32    said software modules is complete, wherein said second final product includes another model

33    of the reservoir.


    8.     (Cancelled)


1     9.     (Currently Amended) The method of claim 7, wherein executing said first subset of

2    software modules in said first predetermined sequence in response to said first input data

3    generates first conditioned data; [[and ]]wherein executing said third subset of software

4    modules in said third predetermined sequence in response to said second input data generates

5    second conditioned data; wherein executing said second subset of software modules in said

6    second predetermined sequence is in response to said first conditioned data; wherein executing

7    said fourth subset of software modules in said fourth predetermined sequence is in response to

8    said second conditioned data, said first final product being generated when the execution of

9    said second subset of software modules in said second predetermined sequence is complete,

10    and said second final product being generated when the execution of said fourth subset of

11    software modules in said fourth predetermined sequence is complete.


1     10.     (Currently Amended) A computer-readable medium readable by a computer tangibly

2    embodying a set of instructions executable by the computer to perform method steps for

3    determining a final product in response to a user objective, said method steps comprising:

4         providing [[said]]a first user objective and providing first input data selected from one

5    or both of wellbore data and reservoir data, and providing a second user objective and

6    providing second input data selected from one or both of wellbore data and reservoir data;

7         generating a specificfirst workflow corresponding to said first user objective, and

8    generating a second workflow corresponding to said second user objective;

9         selecting a plurality of software modules in response to said specificfirst workflow,

10    said plurality of software modules including a first subset of software modules having a first

11    predetermined sequence, and a second subset of software modules having a second

12    predetermined sequence, wherein the software modules of the first subset are part of a first tool,

13    and the software modules of the second subset are part of a second tool;

14         selecting a different plurality of software modules in response to said second workflow,

15  said different plurality of software modules including a third subset of software modules having

16  a third predetermined sequence, and a fourth subset of software modules having a fourth

17  predetermined sequence, wherein the software modules of the third subset are part of the first

18  tool, the software modules of the fourth subset are part of the second tool, wherein the third

19  predetermined sequence is different from the first predetermined sequence, and the fourth

20  predetermined sequence is different from the second predetermined sequence;

21          executing said software modules of the first subset in said first predetermined sequence

22  in response to said first input data;

23          executing said software modules of the second subset in said second predetermined

24  sequence in response to output of the first subset of software modules;[[ and]]

25          executing said software modules of the third subset in said third predetermined

26  sequence in response to said second input data;

27          executing said software modules of the fourth subset in said fourth predetermined

28  sequence in response to output of the third subset of software modules;

29          generating [[said]]a first final product when the execution of said ~~plurality~~first and

30  second subsets of software modules is complete, wherein said first final product includes a

31  model of a reservoir to be produced by a well; and

32          generating a second final product when the execution of said third and fourth subsets of

33  said software modules is complete, wherein said second final product includes another model

34  of the reservoir.


11.    (Cancelled)

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1     12.     (Currently Amended) The computer-readable medium of claim 10, wherein executing

2     said first subset of software modules in said first predetermined sequence in response to said

3     first input data generates first conditioned data; wherein executing said third subset of software

4     modules in said third predetermined sequence in response to said second input data generates

5     second conditioned data;[[and]] wherein executing said second subset of software modules in

6     said second predetermined sequence is in response to said first conditioned data; wherein

7     executing said fourth subset of software modules in said fourth predetermined sequence is in

8     response to said second conditioned data, said first final product being generated when the

9     execution of said second subset of software modules in said second predetermined sequence is

10     complete, and said second final product being generated when the execution of said fourth

11     subset of software modules in said fourth predetermined sequence is complete.

1     13.     (Currently Amended) A system for determining a final product in response to a user

2     objective, comprising:

3         first apparatus for receiving [[said]]a first user objective and receiving first input data

4     selected from one or both of wellbore data and reservoir data, and for receiving a second user

5     objective and receiving second input data selected from one or both of wellbore data and

6     reservoir data;

7         second apparatus for generating a specificfirst workflow corresponding to said first user

8     objective, and for generating a second workflow corresponding to said second user objective;

9         third apparatus for selecting a plurality of software modules in response to said

10     specificfirst workflow, said plurality of software modules including a first subset of software

11     modules having a first predetermined sequence, and a second subset of software modules

12     having a second predetermined sequence, wherein the software modules of the first subset are

13     part of a first tool, and the software modules of the second subset are part of a second tool; and

14     for selecting a different plurality of software modules in response to said second workflow, said

15     different plurality of software modules including a third subset of software modules having a

16     third predetermined sequence, and a fourth subset of software modules having a fourth

17     predetermined sequence, wherein the software modules of the third subset are part of the first

18     tool, and the software modules of the fourth subset are part of the second tool, and wherein the

19     third predetermined sequence is different from the first predetermined sequence, and the fourth

20   predetermined sequence is different from the second predetermined sequence;

21          fourth apparatus for executing said software modules of the first subset in said first

22   predetermined sequence in response to said first input data, [[and ]]executing said software

23   modules of the second subset in said second predetermined sequence in response to output of

24   the first subset of software modules, executing said software modules of the third subset in said

25   third predetermined sequence in response to said second input data, and executing said software

26   modules of the fourth subset in said fourth predetermined sequence in response to output of the

27   third subset of software modules; and

28          fifth apparatus for generating ~~said~~a first final product when the execution of said

29   ~~plurality~~first and second subsets of software modules is complete, and generating a second final

30   product when the execution of said third and fourth subsets of software modules is complete,

31   wherein said first final product includes a model of a reservoir to be produced by a well, and

32   wherein said second final product includes another model of the reservoir.


14.    (Cancelled)


1   15.    (Currently Amended) The system of claim 13, wherein the fourth apparatus for

2   executing said first subset of software modules in said first predetermined sequence in response

3   to said first input data generates first conditioned data; [[and ]]the fourth apparatus for

4   executing said third subset of software modules in said third predetermined sequence in

5   response to said second input data generates second condition data; the fourth apparatus for

6   executing said second subset of software modules in said second predetermined sequence is in

7   response to said first conditioned data; and the fourth apparatus for executing said fourth subset

8   of software modules in said fourth predetermined sequence is in response to said second

9   condition data, said first final product being generated when the execution of said second

10   subset of software modules in said second predetermined sequence is complete and said second

11   final product being generated when the execution of said fourth subset of software modules in

12   said fourth predetermined sequence is complete.

1    16.    (Currently Amended) The method of claim 1, wherein executing the ~~one or more~~

2    software modules of the first subset causes conditioning of the <u>first set of</u> input data to provide

3    [[the ]]output that includes conditioned input data.

1    17.    (Currently Amended) The method of claim 16, wherein conditioning the <u>first set of</u>

2    input data includes interpreting the <u>first set of</u> input data.

1    18.    (Currently Amended) The method of claim 1, further comprising using the reservoir

2    ~~model~~<u>models</u> to predict performance of producing from the reservoir.

1    19.    (Currently Amended) The computer-readable medium of claim 3, wherein executing the

2    ~~one or more~~software modules of the first subset causes conditioning of the <u>first set of</u> input

3    data to provide [[the ]]output that includes conditioned input data.

1    20.    (Currently Amended) The computer-readable medium of claim 19, wherein

2    conditioning the <u>first set of</u> input data includes interpreting the <u>first set of</u> input data.

1    21.    (Currently Amended) The computer-readable medium of claim 3, further comprising

2    using the reservoir ~~model~~<u>models</u> to predict performance of producing from the reservoir.

1    22.    (Currently Amended) The system of claim 5, wherein executing the ~~one or more~~

2    software modules of the first subset causes conditioning of the <u>first set of</u> input data to provide

3    [[the ]]output that includes conditioned input data.

1    23.    (Currently Amended) The system of claim 22, wherein conditioning the <u>first set of</u> input

2    data includes interpreting the <u>first set of</u> input data.

1    24.    (Currently Amended) The system of claim 5, wherein the processor apparatus is to

2    further use the reservoir ~~model~~<u>models</u> to predict performance of producing from the reservoir.

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1    25.    (Currently Amended) The method of claim 7, wherein executing the first subset of

2    software modules causes conditioning of the <u>first</u> input data to provide [[the ]]output that

3    includes conditioned input data.

1    26.    (Currently Amended) The method of claim 25, wherein conditioning the <u>first</u> input data

2    includes interpreting the <u>first</u> input data.

1    27.    (Currently Amended) The method of claim 7, further comprising using the reservoir

2    ~~model~~<u>models</u> to predict performance of producing from the reservoir.

1    28.    (Currently Amended) The computer-readable medium of claim 10, wherein executing

2    the first subset of software modules causes conditioning of the <u>first</u> input data to provide [[the

3    ]]output that includes conditioned input data.

1    29.    (Currently Amended) The computer-readable medium of claim 28, wherein

2    conditioning the <u>first</u> input data includes interpreting the <u>first</u> input data.

1    30.    (Currently Amended) The computer-readable medium of claim 10, wherein the method

2    steps further comprise using the reservoir ~~model~~<u>models</u> to predict performance of producing

3    from the reservoir.

1    31.    (Currently Amended) The system of claim 13, wherein executing the first subset of

2    software modules causes conditioning of the <u>first</u> input data to provide [[the ]]output that

3    includes conditioned input data.

1    32.    (Currently Amended) The system of claim 31, wherein conditioning the <u>first</u> input data

2    includes interpreting the <u>first</u> input data.

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1    33.    (Currently Amended) The system of claim 13, further comprising a sixth apparatus to

2    use the reservoir ~~model~~<u>models</u> to predict performance of producing from the reservoir.